

FIG. 1

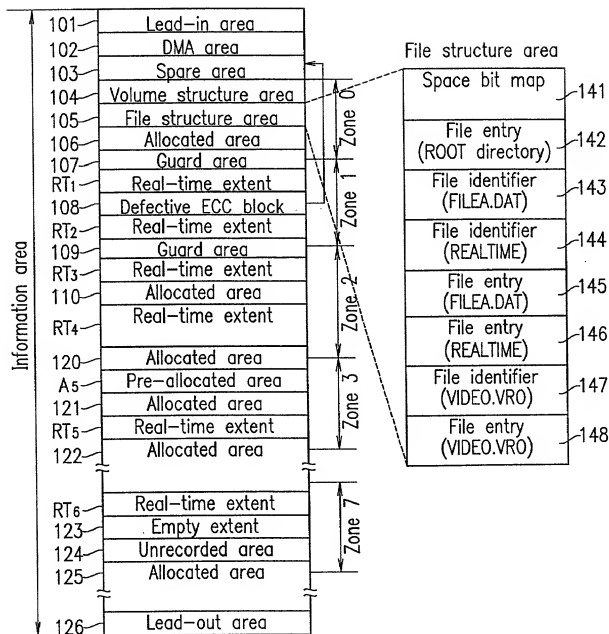
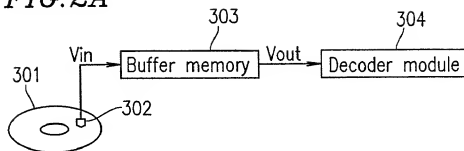


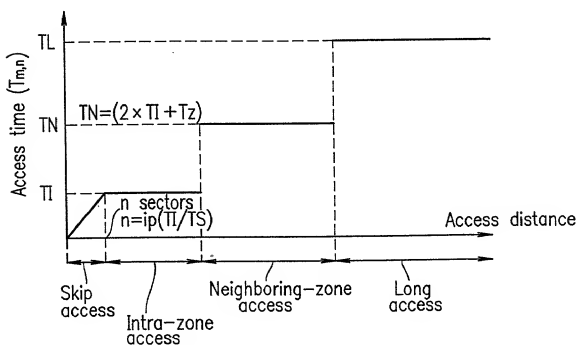
FIG. 2A



Vin: Data transfer rate from disk to buffer memory

Vout: Data transfer rate from buffer memory to decoder module

FIG. 2B



TZ: Zone boundary access time  
TS: Single sector latency

FIG. 3

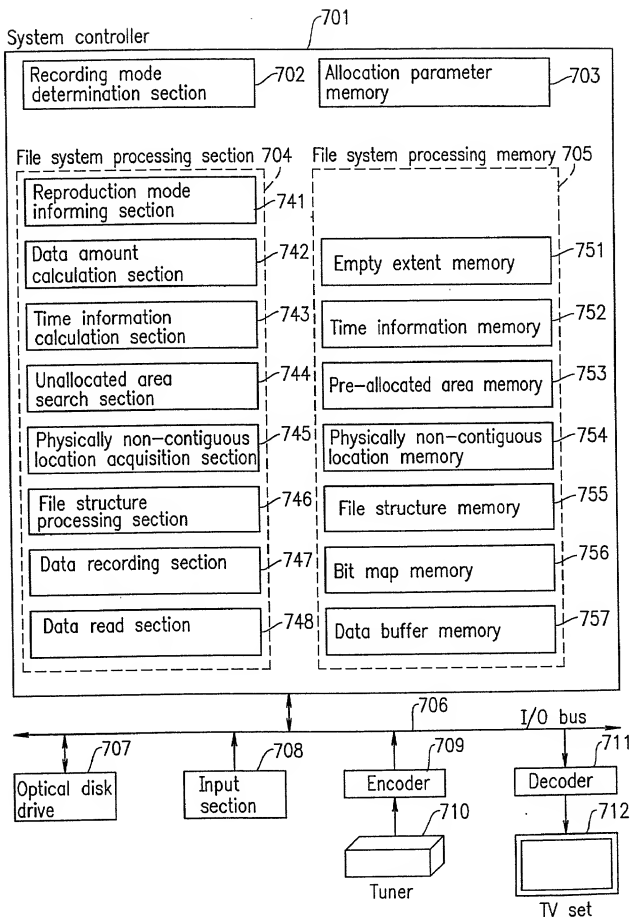


FIG. 4

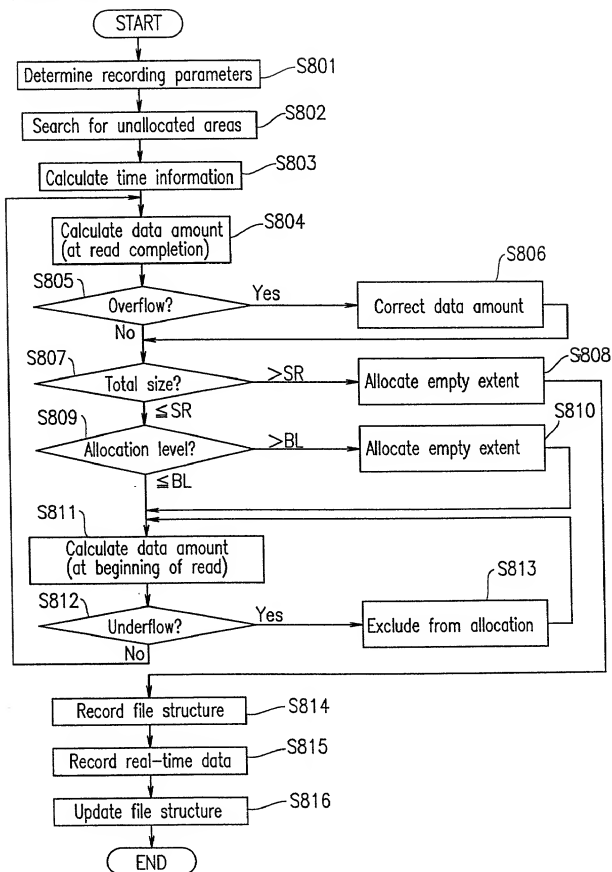


FIG. 5A

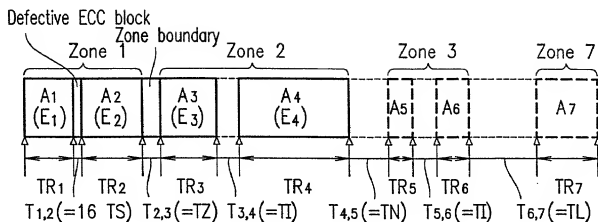


FIG. 5B

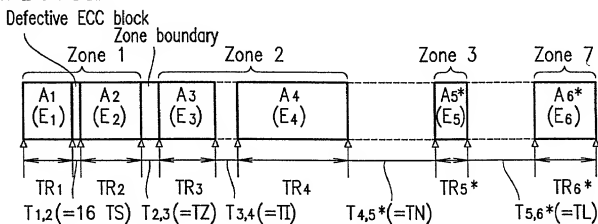
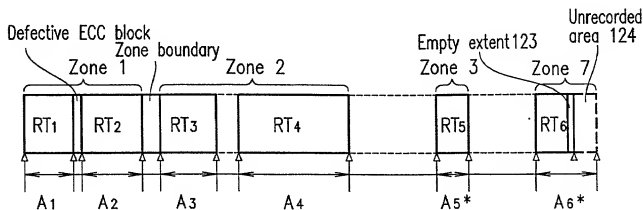


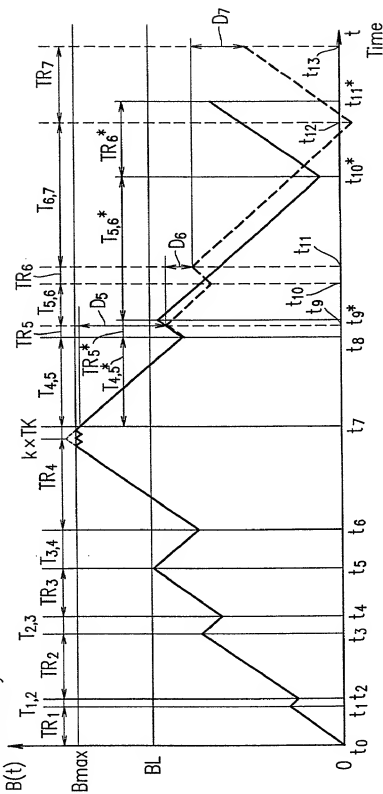
FIG. 5C



△: ECC block boundary

FIG. 6

Data amount  
in buffer memory



**FIG. 7A**

File entry

BP	Field name
0	Descriptor tag
16	ICB tag
...	...
56	Information length
...	...
112	Extended attribute ICB
...	...
168	Extended attribute length (=L_EA)
172	Length of allocation descriptor
176	Extended attribute
L_EA+176	Short allocation descriptor for RT <sub>1</sub>
L_EA+184	Short allocation descriptor for RT <sub>2</sub>
L_EA+192	Short allocation descriptor for RT <sub>3</sub>
L_EA+200	Short allocation descriptor for RT <sub>4</sub>
L_EA+208	Short allocation descriptor for RT <sub>5</sub>
L_EA+216	Short allocation descriptor for RT <sub>6</sub>
L_EA+224	Short allocation descriptor for empty extent

ICB tag

RBP	Field name
...	...
11	File type (=249)
...	...
18	Flag bit4=ONE (Non-relocatable bit)

Extended attribute for allocation

RBP	Field name
0	Vin
2	Vout
4	Buffer memory size
6	Access type
8	Ta
10	Tb
12	Tc

**FIG. 7B**

Short allocation descriptor

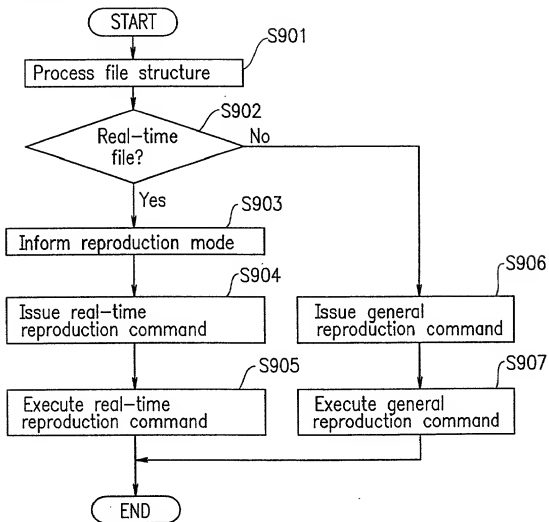
RBP	Field name
0	Extent length
4	Extent location

**FIG. 7C**

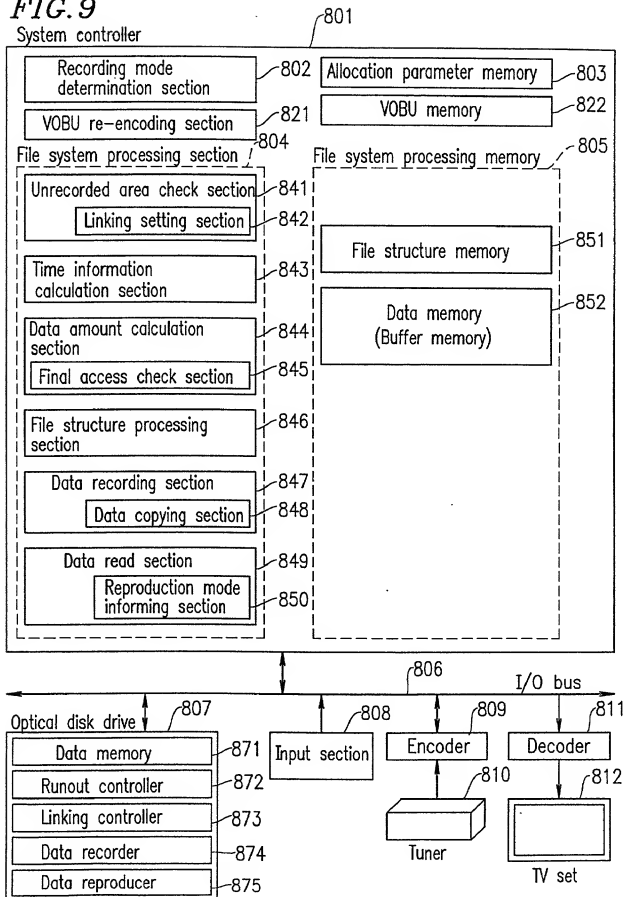
Meanings of 2 most significant bits of extent length

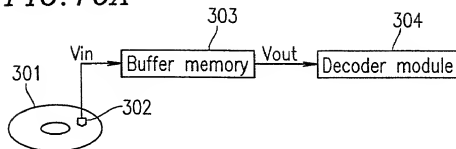
Value	Meaning
0	Allocated and recorded (real-time extent)
1	Allocated but unrecorded (empty extent)
3	Extent of subsequent allocation descriptor

FIG. 8



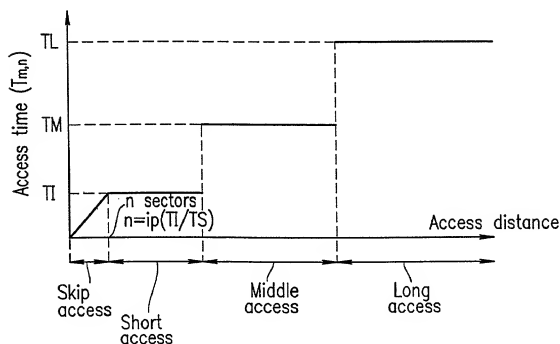


**FIG. 9**

**FIG. 10A**

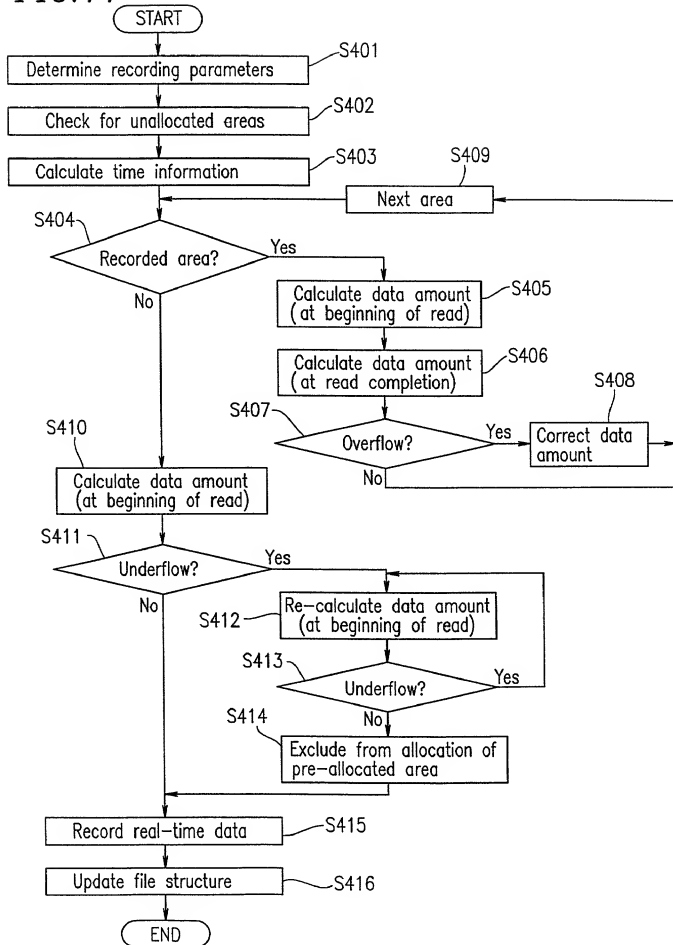
Vin: Data transfer rate from disk to buffer memory

Vout: Data transfer rate from buffer memory to decoder module

**FIG. 10B**

TS: Single sector latency

FIG. 11



**FIG. 12**  
Data amount  
in buffer memory  
 $B(t)$

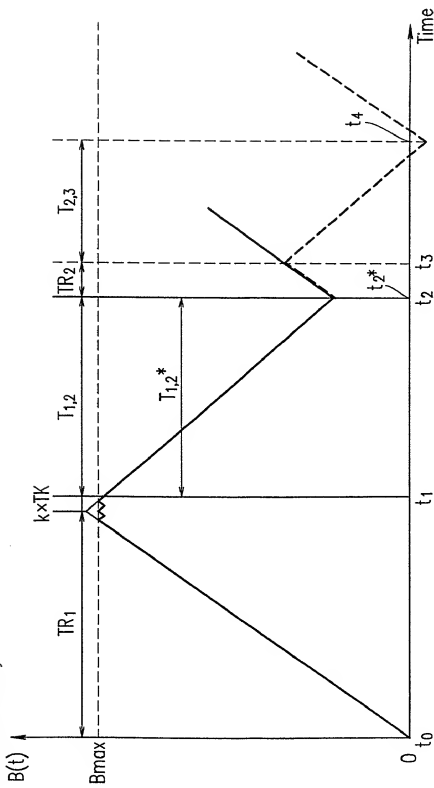


FIG. 13A

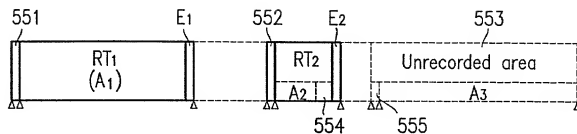


FIG. 13B

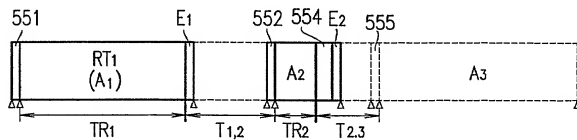


FIG. 13C

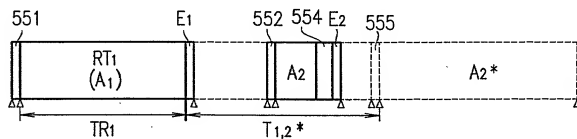
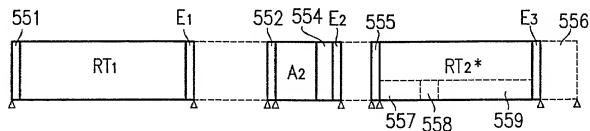


FIG. 13D



△: ECC block boundary

FIG. 14A

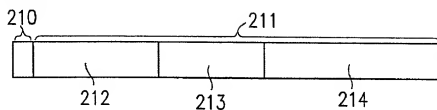


FIG. 14B

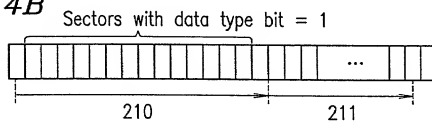


FIG. 14C

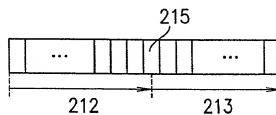


FIG. 14D

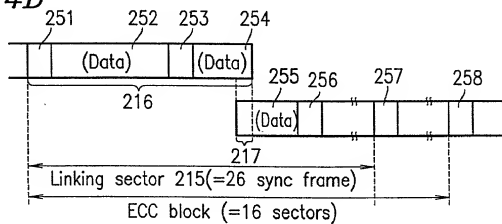


FIG. 14E

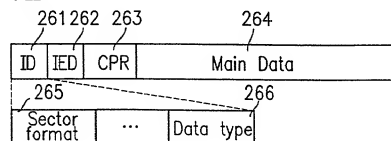
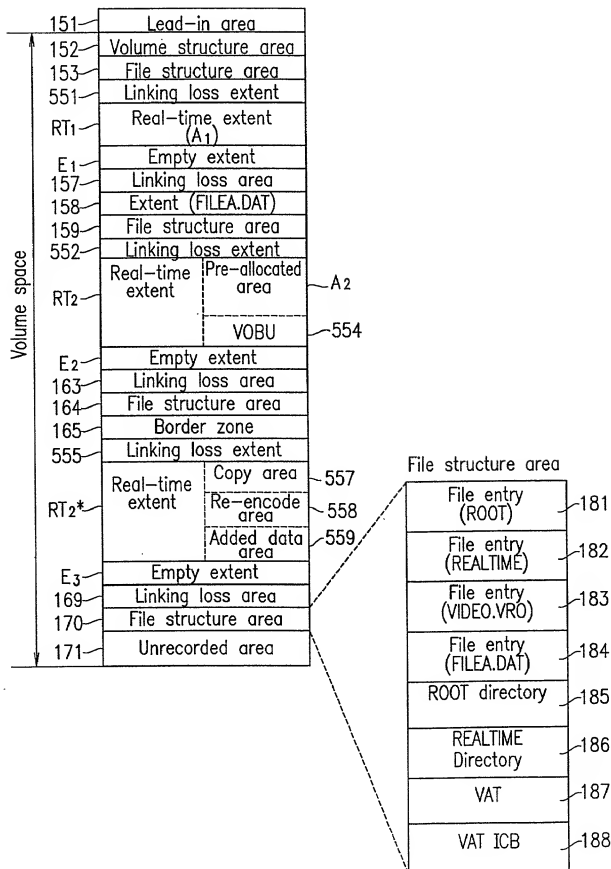
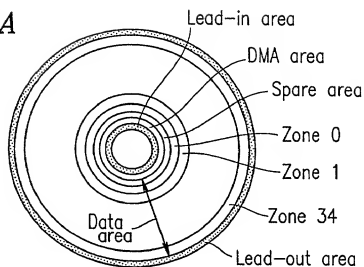
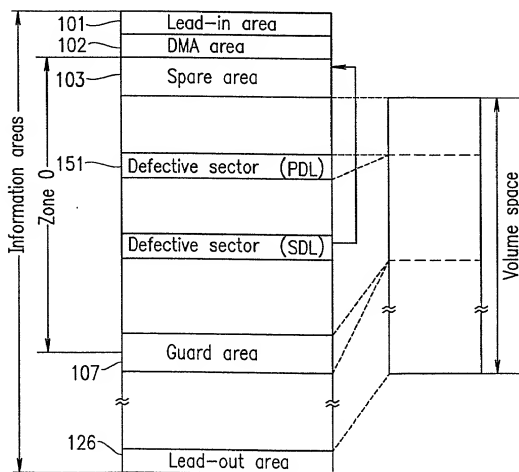


FIG. 15



**FIG. 16A****FIG. 16B**



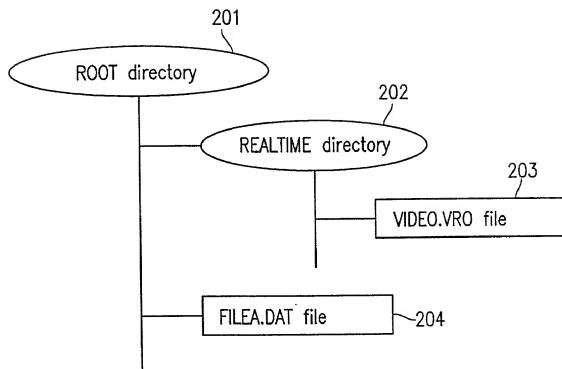
*FIG. 17*

FIG. 18A

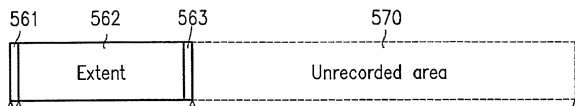


FIG. 18B

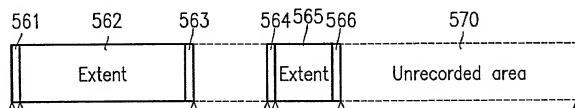
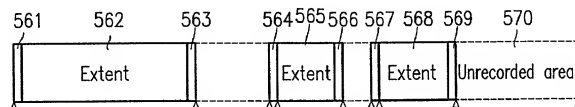


FIG. 18C



△:ECC block boundary

*FIG. 19B*

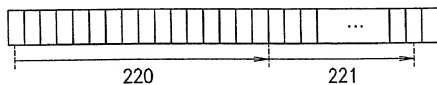


FIG. 19D

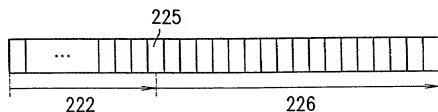


FIG. 19D

